

DAMAGE SURVEY REPORT (DSR)
Emergency Watershed Protection Program – Recovery

Section 1A

Date of Report: March 29, 2006

DSR Number: DSR 019-05-084R Project Number: _____

NRCS Entry Only

Eligible: YES X NO _____

Approved: YES X NO _____

Funding Priority Number (from Section 4) 3de

Limited Resource Area: YES _____ NO X

Section 1B Sponsor

Sponsor Name: Gravity Drainage District No 8 Ward One

Address: 2841 Goos Road

City/State/Zip: Moss Bluff, LA 70611

Telephone Number: 337-855-4388 Fax: _____

Section 1C Site Location Information

County: Calcasieu State: LA Congressional District: 7

Latitude: 30.3483 Longitude: -93.1264 Section: 8 S Township: 8 W Range: 24

UTM Coordinates: _____

Drainage Name: Lateral BB-1 Blackman Bayou Reach: 2 Reaches on channel for 5,100 LF total

Damage Description: Channel Debris

Section 1D Site Evaluation

All answers in this Section must be YES in order to be eligible for EWP assistance.

Site Eligibility	YES	NO	Remarks
Damage was a result of a natural disaster?*	X		
Recovery measures would be for runoff retardation or soil erosion prevention?*	X		
Threat to life and/or property?*	X		
Event caused a sudden impairment in the watershed?*	X		
Imminent threat was created by this event?**	X		
For structural repairs, not repaired twice within ten years?**	X		
Site Defensibility			
Economic, environmental, and social documentation adequate to warrant action? (Go to pages 3, 4, 5 and 6 ***)	X		
Proposed action technically viable? (Go to Page 9 ***)	X		

Have all the appropriate steps been taken to ensure that all segments of the affected population have been informed of the EWP program and its possible effects? YES X NO _____

Comments: GDD has been consulted _____

* Statutory

** Regulation

*** DSR Pages 3 through 6 and 9 are required to support the decisions recorded on this summary page. If additional space is needed on this or any other page in this form, add appropriate pages. 1 of 14

Approved 7/2005

DSR NO: 019-05-084R

Section 1E Proposed Action

Describe the preferred alternative from Findings: Section 5 A: Debris will be removed from the channel via the east side of the channel burned and buried on site. The west side may only be used when necessary to minimize damages to the site. The alternative is to remove debris from both sides and burn and bury on site.

Total installation cost identified in this DSR: Section 3: \$

Section 1F NRCS State Office Review and Approval

Reviewed By:


State EWP Program Manager

Date Reviewed:

4/25/06

Approved By:


State Conservationist

Date Approved:

4/26/06

PRIVACY ACT AND PUBLIC BURDEN STATEMENT

NOTE: The following statement is made in accordance with the Privacy Act of 1974, (5 U.S.C. 552a) and the Paperwork Reduction Act of 1995, as amended. The authority for requesting the following information is 7 CFR 624 (EWP) and Section 216 of the Flood Control Act of 1950, Public Law 81-516, 33 U.S.C. 701b-1; and Section 403 of the Agricultural Credit Act of 1978, Public Law 95-334, as amended by Section 382, of the Federal Agriculture Improvement and Reform Act of 1996, Public Law 104-127, 16 U.S.C. 2203. EWP, through local sponsors, provides emergency measures for runoff retardation and erosion control to areas where a sudden impairment of a watershed threatens life or property. The Secretary of Agriculture has delegated the administration of EWP to the Chief or NRCS on state, tribal and private lands.

Signing this form indicates the sponsor concurs and agrees to provide the regional cost-share to implement the EWP recovery measure(s) determined eligible by NRCS under the terms and conditions of the program authority. Failure to provide a signature will result in the applicant being unable to apply for or receive a grant the applicable program authorities. Once signed by the sponsor, this information may not be provided to other agencies, IRS, Department of Justice, or other State or Federal Law Enforcement agencies, and in response to a court or administrative tribunal.

The provisions of criminal and civil fraud statutes, including 18 U.S.C. 286, 287, 371, 641, 651, 1001; 15 U.S.C. 714m; and 31 U.S.C. 3729 may also be applicable to the information provided. According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0578-0030. The time required to complete this information collection is estimated to average 117/1.96 minutes/hours per response, including the time for reviewing instructions, searching existing data sources, field reviews, gathering, designing, and maintaining the data needed, and completing and reviewing the collection information.

USDA NONDISCRIMINATION STATEMENT

"The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.)

Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination write USDA, Director of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800)795-3272 (voice) or (202)720-6382 (TDD). USDA is an equal opportunity provider and employer.

Civil Rights Statement of Assurance

The program or activities conducted under this agreement will be in compliance with the nondiscrimination provisions contained in the Titles VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (Public Law 100-259); and other nondiscrimination statutes; namely, Section 504 of the Rehabilitation Act of 1973, Title IX of the Amendments of 1972, the Age Discrimination Act of 1975, and the Americans with Disabilities Act of 1990. They will also be in accordance with regulations of the Secretary of Agriculture (7 CFR 15, 15a, and 15b), which provide that no person in the United States shall on the grounds of race, color, national origin, gender, religion, age or disability, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination under any program or activity receiving Federal financial assistance from the U.S. Department of Agriculture or any agency thereof.

Section 2 Environmental Evaluation

2A Resource Concerns	2B Existing Condition	2C Alternatives and Effects		
		Proposed Action	No Action	Alternative
		Remove debris by using one side removal from east side of channel (where possible). Burn and bury onsite. See sec. 1E for specific info.	Leave logs and debris in channel.	Remove debris by working both sides on channel. Burn and bury debris onsite.
2D Effects of Alternatives				
Soil				
Bank erosion	Stable except for exposed soil around uprooted trees on stream bank.	Cause temporary increase in bank erosion from removal of root mass and construction activities on east side of channel	Erosion from root mass will stabilize, but increased upstream flooding will cause additional bank erosion and undercutting.	Cause temporary increase in bank erosion from removal of root mass and construction activities on both sides of channel
Compaction	No compaction	Heavy equipment will cause minor soil compaction at access points	No compaction	Heavy equipment will cause minor soil compaction at access points
Water				
Flooding	Property upstream of debris is subject to damages from flooding after future heavy rainfall events	Upstream flooding will be reduced and damage to property will be minimized from heavy rainfall events	Property upstream of debris blockage will be subject to damages from future heavy rainfall events.	Upstream flooding will be reduced and damage to property will be minimized from heavy rainfall events
Excessive sediments and turbidity	Stream flow minimal. Minor turbidity present.	Disturbance from heavy equipment will cause short term increase in sediment, but reduce long term impacts.,	Sedimentation and turbidity will increase as result of stream bank erosion and scour erosion following heavy rainfall.	Disturbance from heavy equipment will cause short term increase in sediment, but reduce long term impacts
Stream health (including SVAP)	5.1 (poor)	6.1 (fair)	5.1 (poor)	6.1 (fair)
Air				
Particulate matter	No effect	Increase during debris removal and burning	No effect	Increase during debris removal and burning
Plant				
Productivity health and vigor of riparian vegetation.	Many riparian trees are wind blown. Natural regeneration will occur where the canopy has been opened to sunlight.	Some standing and downed trees will be removed for equipment access on east side as required	No trees will be disturbed, Natural regeneration will occur where canopy has been opened.	Some standing and downed trees will be removed for equipment access on both sides as required.
Productivity, health and vigor of stream aquatic vegetation.	Aquatic plants limited to filamentous algae and phytoplankton. Very little rooted submergent or rooted vegetation	Project will not significantly impact aquatic vegetation. Some decrease in algae from improved flow and slight increase in submergent vegetation with clearer water	Stream aquatic growth will be the same as existing condition with some algae growth and limited submergent vegetation.	Project will not significantly impact aquatic vegetation. Some decrease in algae from improved flow and slight increase in submergent vegetation with clearer water
Animal				
Inadequate cover/shelter for wildlife along stream corridor	Riparian forest buffers present in undeveloped segments of stream.	Some temporary reduction in cover on east side where some trees and cover will be removed for access and removal.	Existing riparian buffers will remain along stream where not already cleared.	Some temporary reduction in cover on both sides of channel where some trees and cover will be removed for access and removal
Inadequate cover/shelter for stream fisheries.	Abundant fish cover provided by downed trees and overhanging canopy. Debris is blocking fish movement. Water quantity is limiting factor along portion of reach	Debris will be removed reducing stream cover, but adequate amounts will remain.	Fish cover will remain the same. Fish movement restricted. Water quantity and quality most limiting factors	Debris will be removed reducing stream cover, but adequate amounts will remain.
Other				
aesthetics	Presents of debris in channel degrades channel appearance and water quality	Access from one side will reduce impact to existing riparian buffer.	Aesthetics remain degraded.	Access from both sides will remove considerable amount of trees resulting in more riparian loss.
Mosquito and insect vectors	Water in channel is conducive to mosquito habitat.	Reduced flooding will reduce mosquito habitat in channel and adjacent floodplain	Stagnant pools providing habitat for mosquitos will increase due to flooding	Reduced flooding will reduce mosquito habitat in channel and adjacent floodplain

Section 2E Special Environmental Concerns

Resource Consideration	Existing Condition	Alternatives and Effects		
		Proposed Action	No Action	Alternative
Clean Water Act Waters of the U.S.	Moderate water quality. No obvious contaminants	Improve water quality. CWA permit needed. Water quality certification needed.	Decreased water quality. Increased blockage and flooding.	Improve water quality. CWA permit needed. Water quality certification needed.
Coastal Zone Management Areas	N/A	N/A	N/A	N/A
Coral Reefs	N/A	N/A	N/A	N/A
Cultural Resources	Use FOTG guidance. State level review needed.	Use FOTG guidance. State level review needed.	Use FOTG guidance. State level review needed.	Use FOTG guidance. State level review needed.
Endangered and Threatened Species	(FOTG) Federal/state listed. None observed on site.	(FOTG) Federal/state listed. None observed on site.	(FOTG) Federal/state listed. None observed on site.	(FOTG) Federal/state listed. None observed on site.
Environmental Justice	Not a factor in this project area	Not a factor in this project area	Not a factor in this project area	Not a factor in this project area
Essential Fish Habitat	No essential fish habitat in this project area	No essential fish habitat in this project area	No essential fish habitat in this project area	No essential fish habitat in this project area
Fish and Wildlife Coordination	No stream modification proposed	Will coordinate if issues arise in CWA 404 permit application process.	N/A	. Will coordinate if issues arise in CWA 404 permit application process
Floodplain Management	100 year floodplain function is impaired.	100 floodplain function is restored	100 year floodplain function remains impaired.	100 floodplain function is restored
Invasive Species	Chinese Tallow present in large numbers along stream segment.	Will remove some invasive trees at access locations allowing increased control opportunities.	Chinese Tallow continue to increase as natural part of invasion.	Will remove some invasive trees at access locations allowing increased control opportunities.
Migratory Birds	Provides habitat for neotropical migrants.	Minimal impact on neotropical migrants where trees are removed.	Continue to provide same level of habitat.	Minimal impact on neotropical migrants where trees are removed.
Natural Areas	Use FOTG guidance. No natural areas identified in project area.	Use FOTG guidance. No natural areas identified in project area.	Use FOTG guidance. No natural areas identified in project area.	Use FOTG guidance. No natural areas identified in project area.
Prime and Unique Farmlands	Contains Go, and BB neither are prime farmland.	Contains Go, and BB neither are prime farmland. No impact.	Contains Go, and BB neither are prime farmland.	Contains Go, and BB neither are prime farmland. No impact.
Riparian Areas	Downed timber has reduced riparian habitat on both sides to some degree.	Some standing timber and riparian habitat will be removed on east side. Area will restore naturally	Downed timber and altered forest will remain until natural process restores habitat.	Some standing timber and riparian habitat will be removed on both sides. Area will restore naturally
Scenic Beauty	Downed timber has reduced aesthetics of stream and riparian area.	Aesthetics will be improved by removing downed trees from within channel.	Downed timber in stream and along riparian area will continue to reduce aesthetics	Aesthetics will be improved by removing downed trees from within channel.
Wetlands	Downed timber and debris has partially filled wetlands with debris and altered functions and values.	Removal of debris will restore wetlands to pre storm conditions	Wetlands functions and values will remain in current condition.	Removal of debris will restore wetlands to pre storm conditions
Wild and Scenic Rivers	Not a scenic stream	Not a scenic stream	Not a scenic stream	Not a scenic stream

Completed By: Terry JohnstonDate: 03/31/06

DSR NO: 019-05-084R

Section 2F Economic

This section must be completed by each alternative considered (attach additional sheets as necessary).

	Future Damages (\$)	Damage Factor (%)	Near Term Damage Reduction
Properties Protected (Private)			
2 Homes	\$167,548	.20	\$33,510
3Homes	\$138,759	.20	\$27,752
2 Mobile Homes	\$61,752	.20	\$1,424
2 Barns			
Properties Protected (Public)			
Business Losses			
Other			
Total Near Term Damage reduction			\$75,036
Net Benefit (Total Near Term Damage Reduction minus Cost from Section 3)			\$

Completed By: H McDaniel_____ Date: 3-29-06

DSR NO: 019-05-084R

Section 2G Social Consideration

This section must be completed by each alternative considered (attach additional sheets as necessary).

	YES	NO	Remarks
Has there been a loss of life as a result of the watershed impairment?		X	
Is there the potential for loss of life due to damages from the watershed impairment?		X	
Has access to a hospital or medical facility been impaired by watershed impairment?		X	
Has the community as a whole been adversely impacted by the watershed impairment (life and property ceases to operate in a normal capacity)	X		Impairment increases flooding impact throughout the community. If channel backwater flooding inundates Cardinal Road , access may be limited. Loss of electrical power has been experienced.
Is there a lack or has there been a reduction of public safety due to watershed impairment?	X		Limited access by emergency vehicles, and to property by residents if flooding occurs,. Standing water will pose an additional health hazard due to increased insect populations

Completed By: H McDaniel Date: 3-29-06

Section 2H Group Representation and Disability Information**This section is completed only for the preferred alternative selected.**

Group Representation	Number		
	Total	% effect	total eff
American Indian/Alaska Native Female Hispanic	1	10.4%	0
American Indian/Alaska Native Female Non-Hispanic			
American Indian/Alaska Native Male Hispanic			
American Indian/Alaska Native Male Non-Hispanic	4	10.4%	0
Asian Female Hispanic			
Asian Female Non-Hispanic			
Asian Male Hispanic			
Asian Male Non-Hispanic			
Black or African American Female Hispanic			
Black or African American Female Non-Hispanic			
Black or African American Male Hispanic			
Black or African American Male Non-Hispanic			
Hawaiian Native/Pacific Islander Female Hispanic			
Hawaiian Native/Pacific Islander Female Non-Hispanic			
Hawaiian Native/Pacific Islander Male Hispanic			
Hawaiian Native/Pacific Islander Male Non-Hispanic			
White Female Hispanic			
White Female Non-Hispanic	80	10.4%	8
White Male Hispanic			
White Male Non-Hispanic	73	10.4%	8
Total Group	158	10.4%	16

Total of 52 households=158 divided by 52= 3.4 people per household. Five households effected = 52 divided by 5 = 10.4% of total population:

IF CARDINAL ROAD IS FLOODED A, TOTAL OF 36 RESIDENCES COULD BE EFFECTED= 36 X 3.4 PER HOUSEHOLD= 122.4 PEOPLE EFFECTED BY ACCESS LIMITATIONS.

Census tract(s) 22.01 Block 1000, Block 1002

Completed By: _H McDaniel Date: 3-29-06

Section 2I. Required consultation or coordination between the lead agency and/or the RFO and another governmental unit including tribes:

Easements, permissions, or permits: Access to channel from private properties will require easements/permissions to be obtained by sponsor. Recommend consultation of contractor for right of way access to channel to accommodate equipment being used. Coordination will be handled by NRCS representative to reduce amount of impact to surrounding environment.

Mitigation Description: Access to remove and dispose of debris from Blackman bayou will be from one side when possible to minimize impacts and reduce disturbances. This alternative will prevent impacts to both sides and minimize riparian disturbances. Propose action will help restore hydraulic function to downstream wetlands and reduce mosquito breeding areas and vector problems in adjacent floodplains. Action will be completed without interruption to reduce impacts to wildlife and local residents.

Agencies, persons, and references consulted, or to be consulted:

Corps of Engineers, New Orleans District
Louisiana Department of Environmental Quality
Louisiana Department of Wildlife and Fisheries
Calcasieu Parish Government

Section 4 NRCS EWP Funding Priority

Complete the following section to compute the funding priority for the recovery measures in this application (see instructions on page 10).

Priority Ranking Criteria	Yes	No		Ranking Number Plus Modifier
1. Is this an exigency situation?		X		
2. Is this a site where there is serious, but not immediate threat to human life?		X		
3. Is this a site where buildings, utilities, or other important infrastructure components are threatened?	X			3-d, e,
4. Is this site a funding priority established by the NRCS Chief?		X		
The following are modifiers for the above criteria			Modifier	
a. Will the proposed action or alternatives protect or conserve federally-listed threatened and endangered species or critical habitat?				
b. Will the proposed action or alternatives protect or conserve cultural sites listed on the National Register of Historic Places?				
c. Will the proposed action or alternatives protect or conserve prime or important farmland?				
d. Will the proposed action or alternatives protect or conserve existing wetlands?			Y	
a. Will the proposed action or alternatives maintain or improve current water quality conditions?			Y	
f. Will the proposed action or alternatives protect or conserve unique habitat, including but not limited to, areas inhabited by State-listed species, fish and wildlife management area, or State identified sensitive habitats?				

Enter priority computation in Section 1A, NRCS Entry, Funding priority number.

Remarks:

Section 5A Findings

Finding: Indicate the preferred alternative from Section 2 (Enter to Section 1E):

THE PROPOSED ACTION IS THE PREFERRED ALTERNATIVE. THIS ACTION IS THE LEAST COSTLY ALTERNATIVE THAT ACHIEVES THE RESTORATION OBJECTIVES, MAXIMIZES ENVIRONMENTAL BENEFITS, AND IS SOCIALLY ACCEPTABLE.

I have considered the effects of the action and the alternatives on the Environmental Economic, Social; the Special Environmental Concerns; and the extraordinary circumstances (40 CFR 1508.27). I find for the reasons stated below, that the preferred alternative:

X Has been sufficiently analyzed in the EWP PEIS (reference all that apply)

Chapter 5.2.2.1.2

Chapter _____

Chapter _____

Chapter _____

Chapter _____

_____ May require the preparation of an environmental assessment or environmental impact statement. The action will be referred to the NRCS State Office on this date:

NRCS representative of the DSR team

Title: _____ Date: _____

Section 5B Comments:

Section 5C

Sponsor Concurrence:



Sponsor Representative

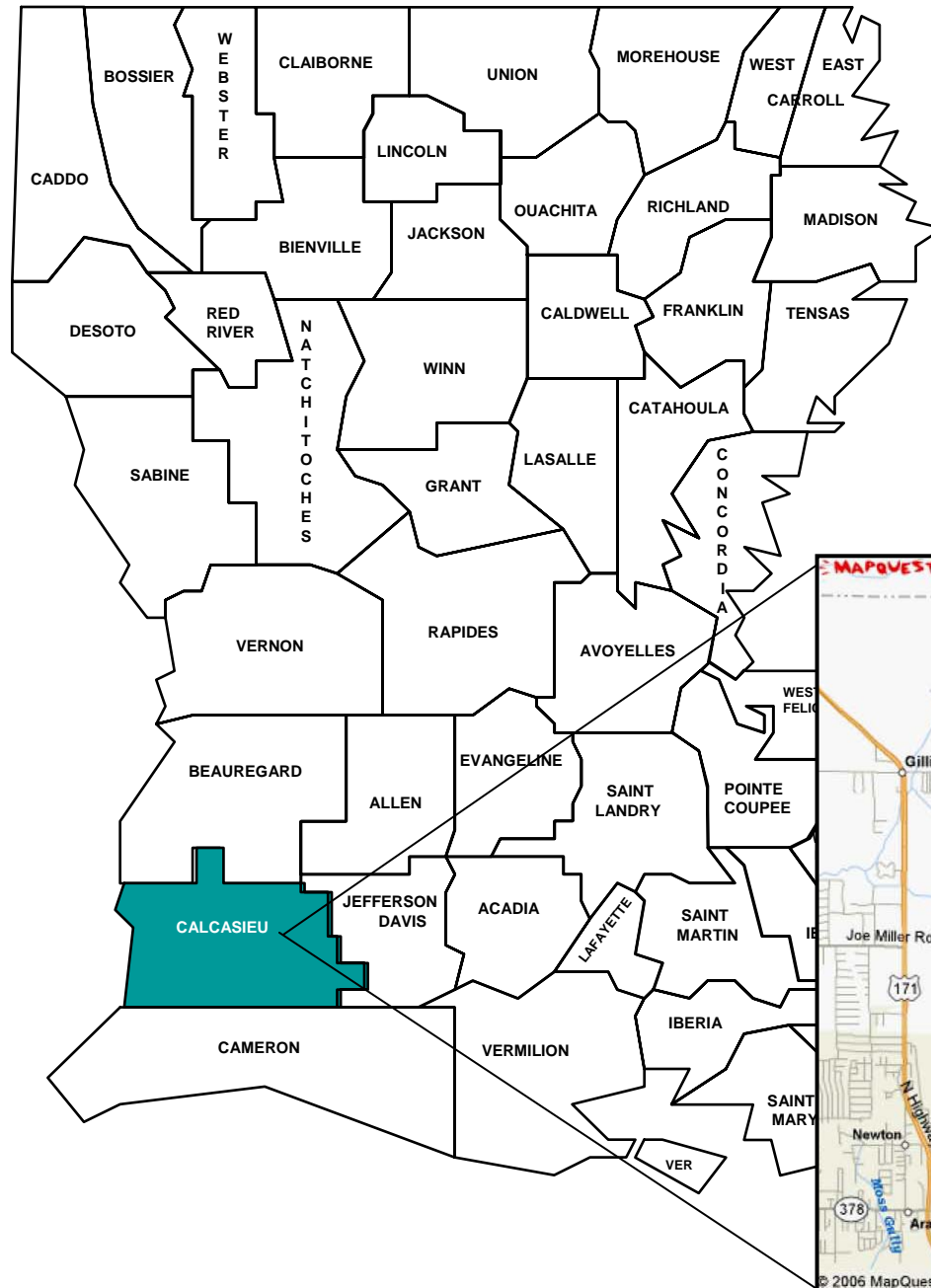
Title: FOREMAN Date: 4-5-06

Section 6 Attachments:

- A. Location Map
- B. Site Plan or Sketches
- C. Other (explain)

SECTION 6

ATTACHMENTS

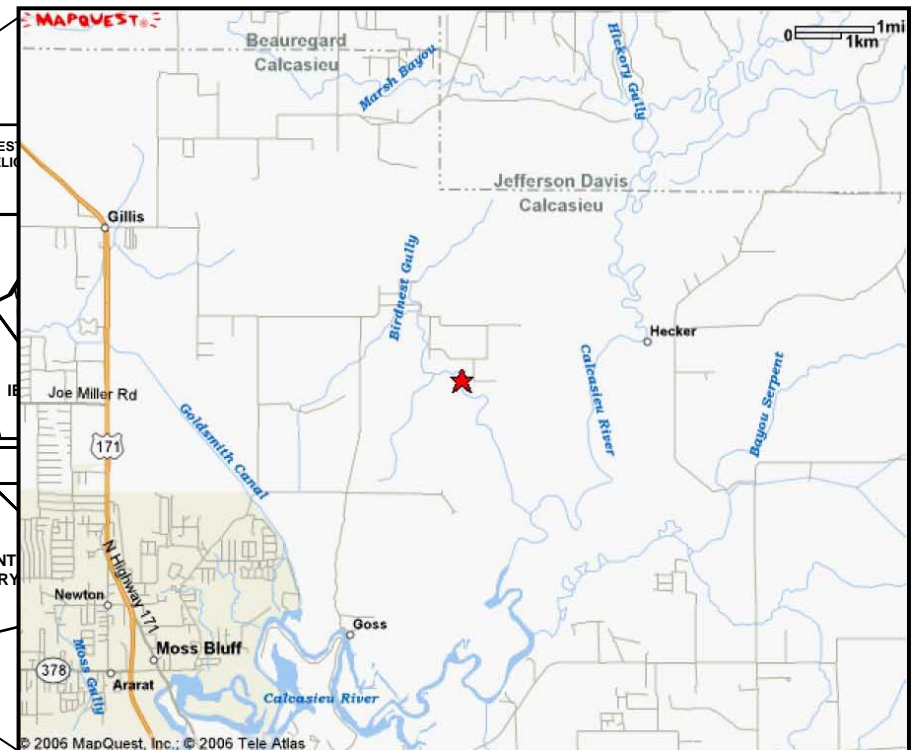


Vicinity Location Map

Calcasieu Parish

DSR# 019-05-084R

Lateral BB-1 Blackman Bayou

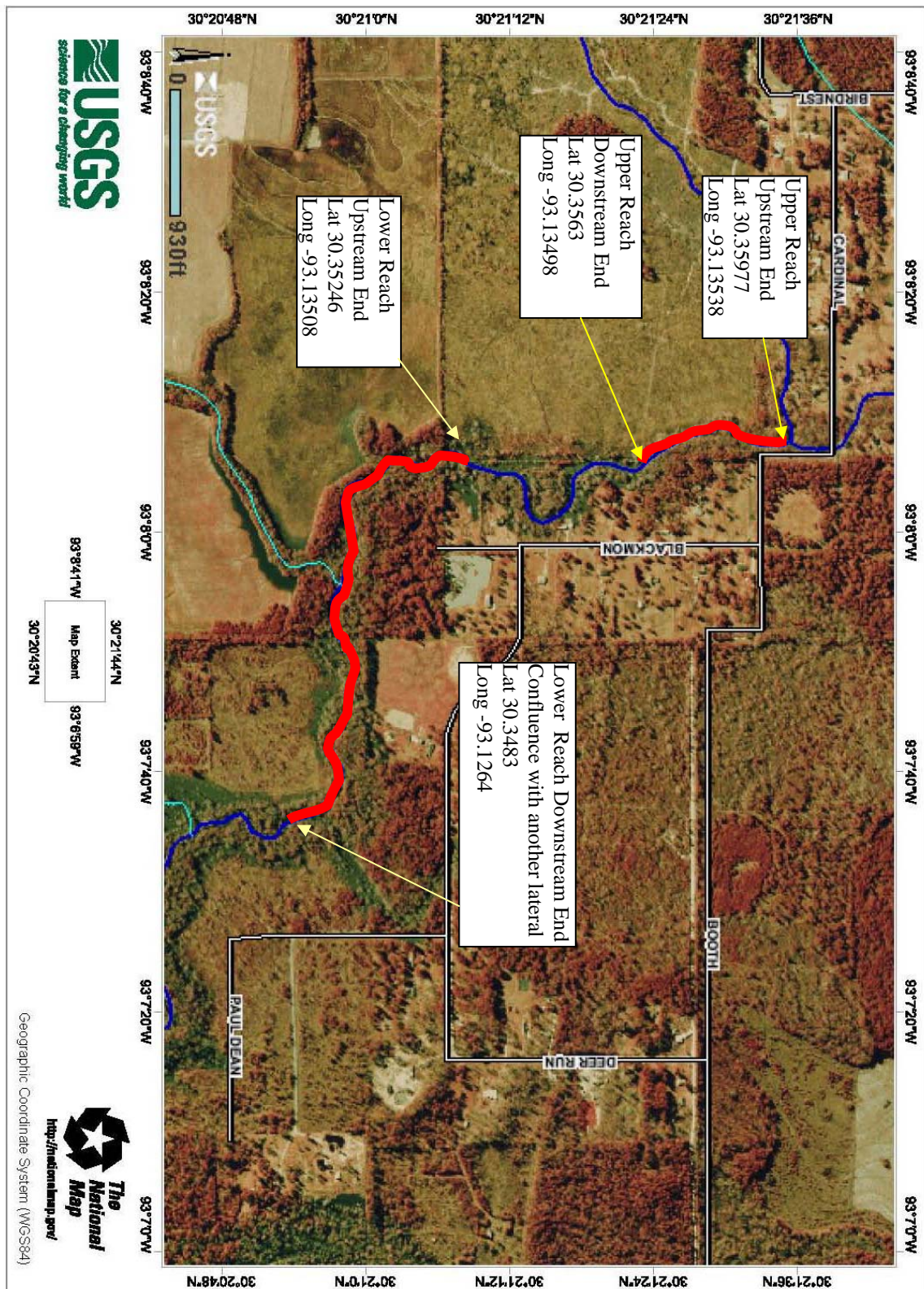


SITE MAP

DSR 019-05-084R

Lateral BB-1 Blackman Bayou

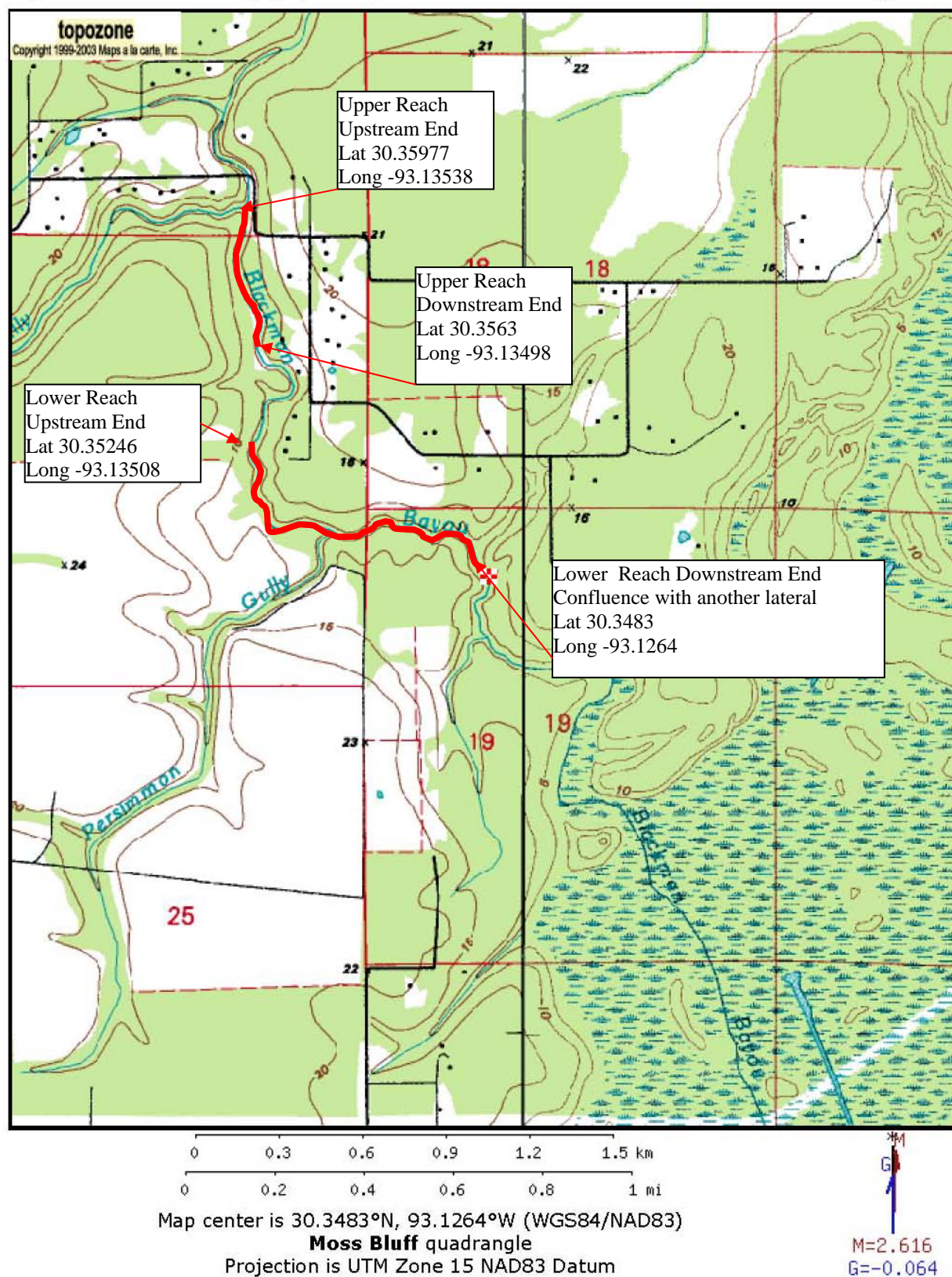
Calcasieu Parish



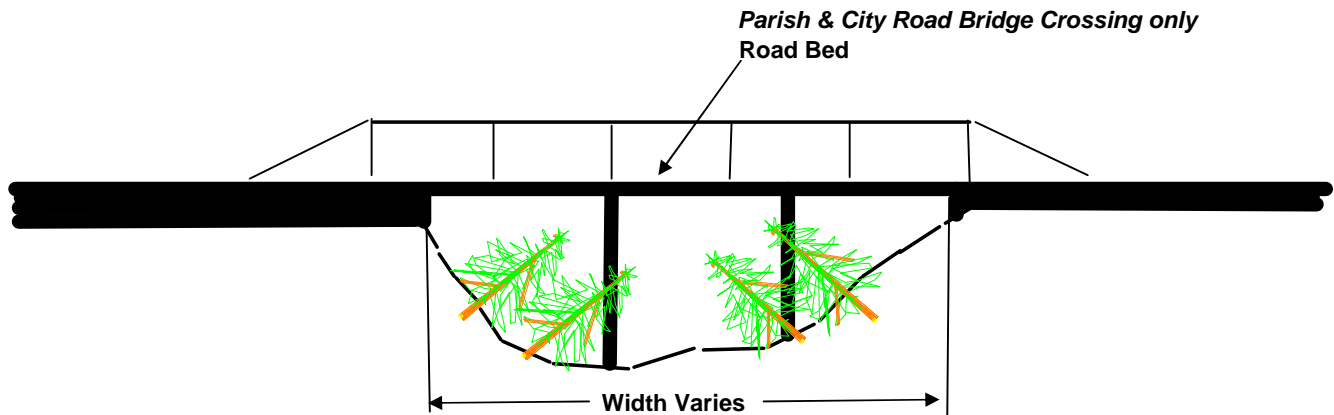
TOPO MAP
DSR 019-05-084R
Lateral BB-1 Blackman Bayou
Calcasieu Parish

TopoZone - The Web's Topographic Map

Page 1 of 1



Debris Removal



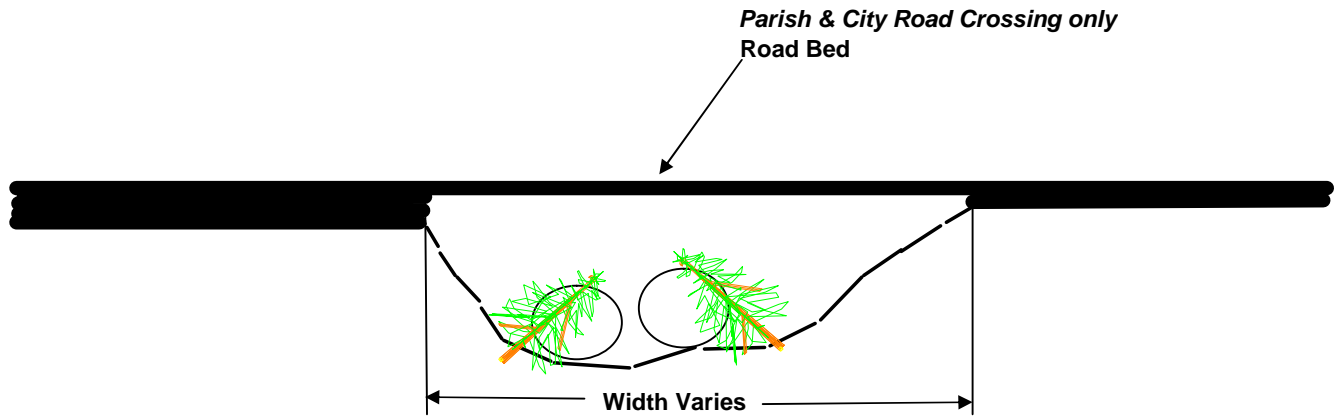
Note: Contract is to remove Debris from upstream and downstream Bridge which includes underside of bridge

Exception: All Crossing which cross State or Federal highways are not included in contract

Typical Road Bridge Crossing Not to Scale

Notice:
48 Hours Before Digging
Call 1-800-272-3020

Debris Removal



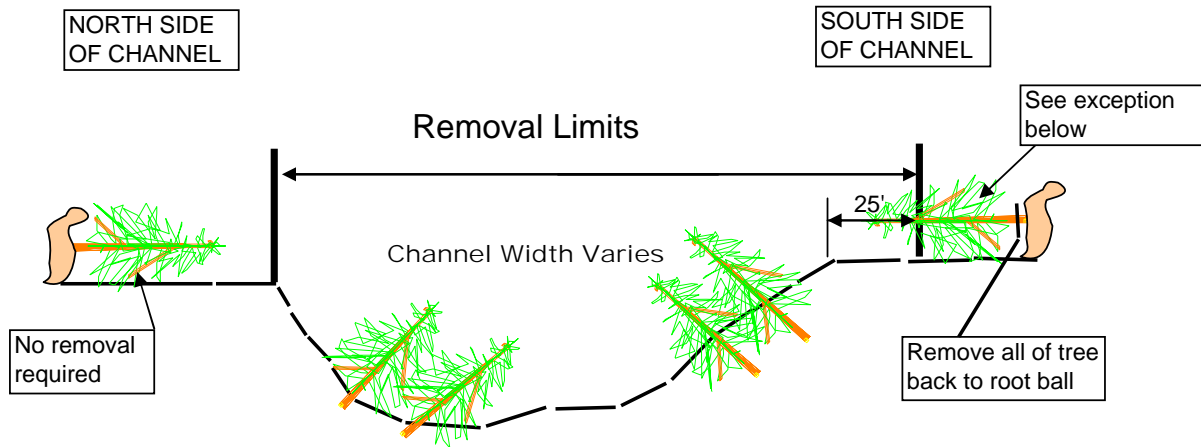
Note: Contract is to remove Debris from upstream and downstream Culverts which includes inside of culverts

Exception: All Crossing which cross State or Federal highways are not included in contract

Typical Road Culvert type Crossing Not to Scale

Notice:
48 Hours Before Digging
Call 1-800-272-3020

Debris Removal



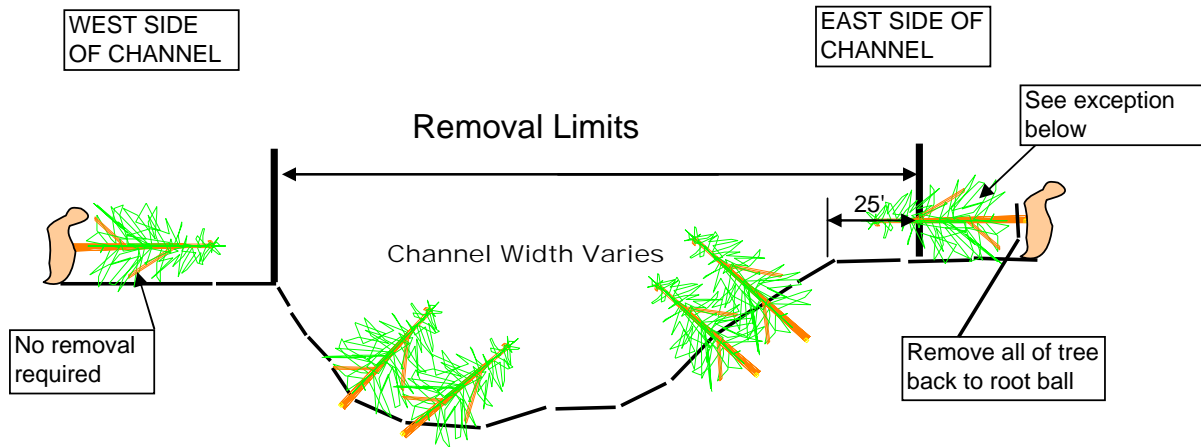
Typical Section Lower Reach

Notice:
48 Hours Before Digging
Call 1-800-272-3020

***Note :** Access and work from south side only, except in locations where structures do not permit as concurred in by the COTR

Exception it may be possible that trees which were located outside of the the removal limits may have fallen into the removal limits, the entire tree will be removed back to the root ball even if only a portion of the tree is within the removal limits

Debris Removal



Typical Section Upper Reach

Notice:

48 Hours Before Digging

Call 1-800-272-3020

***Note :** Access and work from east side only, except in locations where structures do not permit as concurred in by the COTR

Exception it may be possible that trees which were located outside of the the removal limits may have fallen into the removal limits, the entire tree will be removed back to the root ball even if only a portion of the tree is within the removal limits

Channel Obstruction Evaluation

SITE INFORMATION	
Parish: Calcasieu	Site: Blackman Bayou, BB-1
City: Moss Bluff	
Sponsor: GDD # 8, Ward # 1	Reach: BB1-D to BB1-K
Date: March 29, 2006	Gas Pipe 2 to BB1-P
Evaluation Team: McDaniel, Johnson, & Garner	

PHOTO NUMBERS AND BRIEF DESCRIPTION		WAYPOINTS	
Photo #	Description	(CIRCLE location and record in Decimal Degrees)	
		Start Work (D/S end)	30.34968, -93.13212
		Midstream	
		End Work (U/S end)	30.35885, -93.13539

NEARBY AND UPSTREAM STRUCTURES			
(Fill in Numbers, Values, and Size)			
CHURCHES		SCHOOLS	
No. of Churches		No. of Schools	
HOMESITES		PUBLIC FACILITIES	
No. of Homesites		No. of Public Facilities	
BUSINESSES		BUSINESSES	
Average Value of Homes (X \$1,000)		No. of Businesses	
		Size of Businesses	S M L

STREAM CROSSINGS		
(CIRCLE type and write material, size and length)		
TYPE	MATERIAL	NUMBER, SIZE, & LENGTH
Bridge		
Culverts		
Other or None		

UTILITIES			
(CHECK the location of the utilities in the area and CIRCLE stream orientation)			
X	Overhead (Power, Cable, etc.)	U/S	D/S
X	Buried (Gas, Sewer, water, etc.)	U/S	D/S
	Elevated Cross channel (Water, Gas, etc.)	U/S	D/S
Remarks:			

CHANNEL CHARACTERISTICS				FLOW	
(CHECK appropriate box for slope and fill in dimensions information)				Is Water Flowing?	
SLOPES		DIMENSIONS			
X	1.5 : 1 or steeper	Top Width (ft.)	60	<input checked="" type="radio"/> YES	<input type="radio"/> NO
	1.5 : 1 through 3 : 1 Slope	Bottom Width (ft.)	30	Is debris accumulating? (i.e. Leaves, Trash)	
	Flatter than 3 : 1	Depth (ft.)	8	<input checked="" type="radio"/> YES	<input type="radio"/> NO

STATEMENT OF PROBLEM						
(CHECK the boxes as needed, and CIRCLE the size of debris that applies)						
DEBRIS	IN CHANNEL	ACROSS CHANNEL	SIZE OF DEBRIS			BLOCKAGE
						% of X-Section Obstructed:
Pine Trees	X	X	Light	<input checked="" type="radio"/> Moderate	<input checked="" type="radio"/> Heavy	<input checked="" type="radio"/> Less than 25%
Hardwoods	X	X		<input type="radio"/> 26%-50%		
Shrubs				<input checked="" type="radio"/> 51%-75%	<input type="radio"/> 76%-100%	
Other (explain) Reach BB1D to BB1-K (Heavy) ; Gas Pipe 2 to BB1P (Mod.)						

WORK METHOD AND LOCATION	
(CHECK the box that best applies)	
	Within Channel Floating Equipment (i.e. Barge or Marsh Buggy)
	Within Channel Non - Floating Equipment (Excavator/Track-hoe, Spider, etc)
X	From Top Banks
ACCESS TO SITE	
(Explain access issues and possible difficulties)	
Recommended access from the south/ southwest for reach BB1D to BB1K, and from the east for the upper reach to BB1P	